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Issue Brief: MMR, Autism, and Wakefield – Responding to Vaccine-Hesitant Parents

When Andrew Wakefield's 1998 article¹ purporting a link between autism and MMR vaccine was retracted from the *Lancet* in February 2010 for Wakefield's ethical violations and undeclared financial conflicts of interest, it represented a milestone for public health and medical communities, vaccine advocacy groups and concerned parents. Now, after an extensive investigation, the British Medical Journal has further determined that Wakefield's work was fraud²⁻⁴.

Despite the *Lancet's* actions and the broadly publicized BMJ series, some vaccine-hesitant parents may still be concerned that MMR or other vaccines are linked to autism.

- A 2009 survey of 1,552 parents published in *Pediatrics*, found that 25% of respondents agreed with the statement, "Some vaccines cause autism in healthy children"⁵.
- Similarly, an online survey of 2,026 adults in the US in January, 2011 found that "nearly one in five respondents believe there is a link between vaccines and autism"⁶. More than half (53%) were unaware that the Wakefield paper had been retracted and that a published account declares the research to be fraudulent⁶.

Parents' decisions to delay or decline immunizations for their children have led to a decrease in vaccine coverage and an increased risk for disease outbreaks⁸.

- In 2008, there were more cases of measles reported in the US than in any other year since 1997, with >90% of cases occurring in unvaccinated individuals or in those whose vaccination status was unknown⁷. The current pertussis epidemic in California is the largest since 1955⁹.

Key points regarding the Wakefield "study" and BMJ's findings²⁻⁴:

- **None of Wakefield's claims regarding MMR and autism has been accurate.**
 - Wakefield altered information from all the patient's medical records in his publication to support his argument that MMR vaccine caused autism.
 - The Wakefield study claimed that all 12 children were "normal" prior to being vaccinated with MMR, however five had shown developmental problems *before* receiving MMR vaccine and three never had autism.
 - The Wakefield study reported that patients experienced their first behavioral symptoms within *days* of MMR vaccination, but their medical records documented these as starting some *months* after vaccination.
- **No studies have been able to replicate the results reported by Wakefield** and Wakefield himself was unable to reproduce his results in subsequent studies.
- **Wakefield's medical license was revoked** last May after the British General Medical Council concluded that he committed 30 **ethics violations** and had displayed a 'callous disregard' for the suffering of his test subjects.
- **Wakefield failed to disclose serious financial conflicts of interest.** He received nearly \$674,000 from lawyers trying to build a case against vaccine manufacturers and he attempted to profit by patenting future tests for "vaccine-induced diseases" and his own "safe" vaccines that he predicted would generate millions of dollars. Most of his co-authors abandoned the study in 2004 when payments from the attorneys were revealed.

Responding to parents' concerns regarding vaccines and autism¹⁰:

1. Be patient and empathetic – Reassure parents that you understand their child's health is their top priority and it is also your top priority.
2. Convey your knowledge that the onset of (regressive) autism symptoms often coincides with the timing of vaccination but *is not caused by vaccination*.
3. Inform parents that all reputable studies have found no link between MMR and autism. Multiple studies have been conducted since 1998 in several countries using a variety of sound epidemiological methods and all come to the same conclusion –no association between MMR (or thimerosal, or other vaccines) and autism.
4. Remind parents that vaccine-preventable diseases, which may cause serious complications and even death, remain a threat.
5. Express your personal and professional opinion that vaccination is very safe.
6. **Provide a strong recommendation to parents to vaccinate their child(ren).**
7. Show your willingness to continue the dialogue at future appointments if the parent chooses not to vaccinate.

Resources for Parents:

- **American Academy of Pediatrics:** "What parents should know about MMR and autism," <http://www.aap.org/immunization/families/autismfacts.html> and "Vaccine Studies: Examine the Evidence," <http://www.aap.org/immunization/>
- **Autism Science Foundation:** www.autismsciencefoundation.org
- **Children's Hospital of Philadelphia's Vaccine Education Center:** "Vaccines and autism," <http://www.chop.edu/service/vaccine-education-center/order-educational-materials/>
- **Immunization Action Coalition:** "MMR and Autism," <http://www.immunize.org/concerns/mmr.asp>
- **National Network for Immunization Information:** "Evaluating Information About Vaccines on the Internet," July 12, 2010 www.immunizationinfo.org/issues/general/evaluating-information-about-vaccines-internet
- **US Centers for Disease Control & Prevention:** "Understanding MMR Vaccine Safety," <http://www.cdc.gov/vaccines/spec-grps/hcp/conv-materials.htm#uvss>

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